

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A data transmitter comprising:

a time stamp detector ~~a detection means~~ for detecting a reference time stamp to generate a system clock from a transport packet ~~from a packet data of a first transport stream;~~

a time stamp adding unit for adding the ~~an adding means for producing an output of the packet data of said first transport stream by adding thereto "m" bits ("m" represents a positive integer) of lower order data in "n" bits ("n" represents a positive integer, and $n \geq m$) of said reference time stamp detected by said time stamp~~ ~~detection means,~~ detector to the transport packet as a first header information; and

a transmission unit ~~means for transmitting the transport packet and the first header information as a transmission packet~~ ~~converting the output of said adding means into a second transport stream, and transmitting said second transport stream.~~

2-6. (Cancelled)

7. (New) A data transmitter comprising:

a time stamp detector for detecting a reference time stamp to generate a system clock from a transport packet;

a time stamp adding unit for adding the reference time stamp detected by the time stamp detector to the transport packet as a first header information;

a transmission time stamp adding unit for adding a transmission time stamp to the transport packet as a second header information; and

a transmission unit for transmitting the transport packet, the first header information and the second header information as a transmission packet.

8. (New) A data transmitter comprising:

a time stamp detector for detecting a reference time stamp to generate a system clock from a transport packet;

a time stamp adding unit for adding the reference time stamp detected by the time stamp detector to the transport packet as a first header information and a flag signifying the absence of the reference time stamp; and

a transmission unit for transmitting the transport packet, the first header information and the flag as a transmission packet.

9. (New) A data transmitter comprising:

a time stamp detector for detecting a reference time stamp to generate a system clock from a transport packet;

a time stamp adding unit for adding the reference time stamp detected by the time stamp detector to the transport packet as a first header information and a flag signifying the presence of the reference time stamp;

a transmission time stamp adding unit for adding a transmission time stamp to the transport packet as a second header information; and

a transmission unit for transmitting the transport packet, the first header information, the flag and the second header information as a transmission packet.

10. (New) A data transmitter comprising:

a time stamp detector for detecting a reference time stamp to generate a system clock from a transport packet;

a time stamp adding unit for adding a flag signifying the absence of the reference time stamp in case that the time stamp detector does not detect the reference time stamp; and

a transmission unit for transmitting the transport packet and the flag as a transmission packet.

11. (New) A data receiver comprising:

a time stamp detector for detecting a reference time stamp to generate a system clock from a transport packet;

a time stamp adding unit for adding the reference time stamp detected by the time stamp detector to the transport packet as a first header information in case that the time stamp detector detects the reference time stamp; and

a transmission unit for transmitting the transport packet and the first header information as a transmission packet in case that the transport packet has the reference time stamp, and transmitting the transport packet as a transmission packet in case that the transport packet does not have the reference time stamp.

12. (New) A data transmitter comprising:

a time stamp detector for detecting a reference time stamp to generate a system clock from a transport packet;

a time stamp adding unit for adding the reference time stamp detected by the time stamp detector to the transport packet as a first header information;

a transmission time stamp adding unit for adding a transmission time stamp to the transport packet as a second header information; and

a transmission unit for transmitting the transport packet, the first header information and the second header information as a transmission packet in case that the transport packet has the reference time stamp, and transmitting the transport packet and the second header information as a transmission packet in case that the transport packet does not have the reference time stamp.

13. (New) A data transmitter comprising:

a time stamp detector for detecting a reference time stamp to generate a system clock from a transport packet;

a time stamp adding unit for adding the reference time stamp to the transport packet as a first header information in case that the time stamp detector detects the reference time stamp and a flag signifying either the presence or the absence of the reference time stamp; and

a transmission unit for transmitting the transport packet, the first header information and the flag as a transmission packet in case that the transport packet has the reference time stamp, and transmitting the transport packet and the flag as a transmission packet in case that the transport packet does not have the reference time stamp.

14. (New) A data transmitting comprising:

a time stamp detector for detecting a reference time stamp to generate a system clock from a transport packet;

a time stamp adding unit for adding the reference time stamp detected by the time stamp detector to the transport packet as a first header information and a flag signifying either the presence or the absence of the reference time stamp;

a transmission time stamp adding unit for adding a transmission time stamp to the transport packet as a second header information; and

a transmission unit for transmitting the transport packet, the first header information, the flag and the second header information as a transmission packet in case that the transport packet has the reference time stamp, and transmitting the transport packet, the flag and the second header information as a transmission packet in case that the transport packet does not have the reference time stamp.

15. (New) The data transmitter according to claim 1, 7, 8, 9, 11, 12, 13 or 14, wherein, the time stamp adding unit adds "m" bits ("m" represents a positive integer) of lower-order data in "n" bits ("n" represents a positive integer, and $n > m$) of the reference time stamp detected by the time stamp detector to the transport packet as a first header information.

16. (New) A data receiver comprising:

a reception unit for receiving a transmission packet transmitted from the data transmitter according to claim 1; and

a time stamp detector for detecting the reference time stamp from the first header information in the transmission packet.

17. (New) A data receiver comprising:

a reception unit for receiving a transmission packet transmitted from the data transmitter according to claim 7;

a time stamp detector for detecting the reference time stamp from the first header information in the transmission packet; and

a transmission time stamp detector for detecting the transmission time stamp from the second header information in the transmission packet.